

**LOW-TEMPERATURE FABRICATION  
OF THIN-FILM ENERGY-STORAGE DEVICES**

**Abstract of the Disclosure**

5           A method and system for fabricating solid-state energy-storage devices including fabrication films for devices without an anneal step, especially a cathode anneal of thin-film batteries. A film of an energy-storage device is fabricated by depositing a first material layer to a location on a substrate. Energy is supplied directly to the material forming the film. The energy can be in the form of  
10 energized ions of a second material. Supplying energy directly to the material and/or the film being deposited assists the growth of the crystalline structure of film. For lithium-ion energy-storage devices, the first material is an intercalation material, which releasably stores lithium ions therein. Supercapacitors and energy-conversion devices are also fabricated according to the methods.

"Express Mail" mailing label number: EL671638336US\_\_\_\_\_

Date of Deposit: March 23, 2001

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.